Country: **GERMANY**
Type of Document: **International Market Insight**
Title: **THE BUSINESS AIRCRAFT MARKET**

DEFINITIONS:

ACCORDING TO THE ICAO, GENERAL AVIATION INCLUDES ALL PRIVATE AND BUSINESS AIRCRAFT, CORPORATE AVIATION, FERRY AND DELIVERY FLIGHTS, SPORTS AND RECREATIONAL AVIATION, DEVELOPMENT, TEST AND CERTIFICATION FLIGHTS. THE AIRCRAFT NEED NOT BE OWNED BY THE PILOT, IT CAN ALSO BE RENTED BOTH FROM NON-PROFIT CLUBS AND FROM FIXED BASE OPERATORS

IN ACCORDANCE TO ICAO DEFINITIONS, BUSINESS AVIATION IS A SUBSET OF GENERAL AVIATION & AERIAL WORKS AND INCLUDE ALL CIVIL AVIATION OPERATIONS OTHER THAN COMMERCIAL AIR TRANSPORT. THE TERM INCLUDES COMPANY FLIGHTS, CORPORATE OPERATIONS, FERRY FLIGHTS AND PRIVATE BUSINESS FLIGHTS.
WITHIN BUSINESS OPERATIONS ALL TYPES OF POWERED AIRCRAFT ARE USED:

- AIRCRAFT WITH TURBO-FAN ENGINES
- AIRCRAFT WITH TURBO-PROP ENGINES
- AIRCRAFT WITH RECIPROCATING ENGINES
- HELICOPTERS WITH TURBINE ENGINES
- HELICOPTERS WITH RECIPROCATING ENGINES

OPERATORS INCLUDE:

- CORPORATE AVIATION OPERATORS
- FBOS AND RENTAL COMPANIES
- PRIVATE PILOTS

ACCORDING TO ICAO STATISTICS 88% OF ALL REGISTERED CIVIL AIRCRAFT ARE USED IN GENERAL AVIATION & AERIAL WORK OPERATIONS, 57% OF WHICH ARE PRIVATE OR BUSINESS TRAVEL ACTIVITIES.

GENERAL INTRODUCTION

GENERAL AVIATION IS CONSIDERED TO BE AN INTEGRAL COMPONENT OF THE FEDERAL REPUBLIC'S AND GLOBAL TRANSPORTATION SYSTEM. IN CONTRAST TO COMMERCIAL AIR TRANSPORT, GENERAL AVIATION PROVIDES A FLEXIBLE, FAST

EFFICIENT METHOD OF CONNECTING REMOTE REGIONS WITH BUSINESS CENTERS, PROVIDES A SOLID BASIS FOR JOBS AND HELPS FACILITATE ECONOMIC GROWTH THROUGH THE EFFICIENT AND SAFE TRANSPORTATION OF PEOPLE AND GOODS THROUGHOUT THE COUNTRY AND THE REST OF THE WORLD.

BUSINESS AVIATION IS A SEGMENT OF GENERAL AVIATION AND IS MADE UP OF INDIVIDUALS AND COMPANIES WHO USE AIRCRAFT AS A TOOL IN THE CONDUCT OF THEIR BUSINESS. THE TOP END OF BUSINESS AVIATION IS MOSTLY REFERRED TO AS CORPORATE AVIATION AND RANGES FROM A 4/5-SEAT PISTON POWERED SHORT RANGE AIRCRAFT TO A 20+ SEAT INTERCONTINENTAL BUSINESS JET. MANY COMPANIES USE BUSINESS AIRCRAFT TO TRANSPORT SENIOR RANKING PERSONNEL AND PRIORITY GOODS AS WELL AS TO BRING CUSTOMERS TO REMOTE FACILITIES.

OF ALL BENEFITS NAMED IN CONNECTION WITH BUSINESS AVIATION, FLEXIBILITY SEEMS TO BE THE MOST IMPORTANT FACTOR APART FROM EFFICIENCY, AND COST EFFECTIVENESS. THE COMPANIES OPERATING AN AIRCRAFT FOR BUSINESS USE AS WELL AS PRIVATE PERSONS CAN CONTROL THEIR TRAVEL NEEDS. THE TIME FACTOR IS AN EQUALLY IMPORTANT CRITERION FOR A COMPANY TO CHOOSE ITS OWN AIRCRAFT AS A MEANS OF TRANSPORTATION.

ONE PROBLEM CURRENTLY TO BE FACED WITHIN THE FIELD OF GENERAL AVIATION IS THE DISTRIBUTION OF SLOTS, WHICH HAS THE SAME IMPORTANCE TO GENERAL AVIATION AS TO COMMERCIAL AVIATION. CURRENT METHODS OF AWARDING THE SLOTS HAVE TO BE REVIEWED SO THAT GENERAL AVIATION IS NOT AT A DISADVANTAGE WITHIN THIS PROCESS.

FURTHER CONSTRAINTS THAT BUSINESS AVIATION FACE RESULT FROM A BASICALLY DIFFERENT CONCEPTION OF THIS SPECIFIC SECTOR OF AVIATION THAN THE ONE FIND IN THE UNITED STATES. THE OVERALL NEGATIVE ATTITUDE IN GERMANY EUROPE INFLUENCES ACCESS TO AERODROMES. AIRSPACE USER FEES AND BURDENSOME REGULATION GIVES A NEGATIVE IMPRESSION OF THE EUROPEAN AIR TRANSPORT SYSTEM. THUS, THE INTERNATIONAL AIRCRAFT OWNER AND PILOT ASSOCIATION (IAOPA) SEES IT AS ONE OF ITS MAJOR TASKS TO MAKE ALL POLITICAL LEVELS UNDERSTAND THE ECONOMIC IMPACT AND BENEFIT THAT IS DERIVED FROM A THRIVING GENERAL AVIATION INDUSTRY. IAOPA DEMANDS ONE CENTRALISED EUROPEAN POLICY TOWARDS GENERAL AVIATION, AS IT SEES AVIATION AS AN IMPORTANT RESOURCE IN TRANSPORTATION AND A KEY COMPONENT IN THE MOVEMENT OF PEOPLE AND GOODS IN A DEVELOPED ECONOMY.

IN GERMANY, THE GENERAL AVIATION INDUSTRY SUPPORTS APPROXIMATELY 15,000 DIRECT JOBS, WITH AN ADDITIONAL 30,000 JOBS IN SUPPORT OF THE INDUSTRY. GENERAL AVIATION, AERIAL WORK OPERATION AND AVIATION COMPANIES HAVE A GROSS SALES OF APPROXIMATELY USD 0.9 BILLION. OVER 200 AVIATION COMPANIES, INCLUDING AIR TAXI AND REGIONAL AVIATION TRANSPORT, OPERATE IN GERMANY, AS WELL AS OVER 40 ACKNOWLEDGED DEVELOPMENT COMPANIES, 141 MANUFACTURERS AND OVER 400 AVIATION TECHNOLOGY COMPANIES. FOURTY FIVE

HELICOPTER COMPANIES WITH 1,119 EMPLOYEES OPERATE IN THE FIELDS OF RESCUE AND SAFETY, PASSENGER TRANSPORT, SURVEYING, MONITORING OF PIPELINES AND HIGH VOLTAGE LINES, GOODS TRANSPORT, AERIAL PHOTOGRAPHY, AGRICULTURAL FLIGHTS ETC. GERMANY IS ALSO HOME TO 99 BUSINESS CHARTER COMPANIES. (A COMPLETE LIST CAN BE OBTAINED THROUGH THE US-EMBASSY, BERLIN)

GENERAL AVIATION, AERIAL WORK OPERATIONS AND OTHER BUSINESS TRANSPORT PROVIDE APPR. 85% OF ALL AIRCRAFT, ACCOUNT FOR 80% OF ALL TAKE OFFS AND 63% OF ALL FLIGHT HOURS IN THE FEDERAL REPUBLIC OF GERMANY. BUSINESS AVIATION'S SHARE OF THE OVERALL TRAFFIC AMOUNTS TO 3.8%. IN GERMANY 43,000 HOLDERS OF PRIVATE PILOTS LICENSE-A USE AIRCRAFT FOR PRIVATE OR BUSINESS PURPOSES

THERE ARE 17 INTERNATIONAL AIRPORTS, 18 REGIONAL AIRPORTS AS WELL AS 99 HELICOPTER LANDING PADS IN GERMANY. AT COMMERCIAL AIRPORTS, GENERAL AVIATION'S AND AERIAL WORK OPERATION'S SHARE OF AIR TRANSPORT AND THAT OF BUSINESS AIR TRANSPORT MAY, IN SOME CASES, AMOUNT TO 50%, ALTHOUGH AVERAGE IT IS 12%.

GERMANY HAS RECENTLY FACED AN INCREASE WITHIN THE BUSINESS AVIATION SECTOR AND THIS INCREASE IS STILL ONGOING, AS REPORTED BY AEROKURIER FLUGREVUE WHO CONDUCTED A SURVEY AMONG CHARTER COMPANIES. SEVENTY PERCENT OF THE COMPANIES PARTICIPATING IN THE SURVEY ANSWERED THAT THEY SEE THE FUTURE OF THE INDUSTRY IN A POSITIVE LIGHT. SIXTY PERCENT OF THE RESPONDING COMPANIES PLAN TO ENLARGE THEIR FLEETS WITHIN THE NEXT TWELVE MONTHS. SIXTY-FOUR PERCENT OF THE COMPANIES STATED THAT THEY WERE GOING TO INCREASE THEIR STAFF, ESPECIALLY PILOTS AND FLIGHT CREWS.

FRACTIONAL OWNERSHIP

THE IDEA OF SHARING AN AIRCRAFT FOR THE USE OF SEVERAL PERSONS ORIGINATES IN THE UNITED STATES AND HAS STIMULATED THE WHOLE MARKET ON THE OTHER SIDE OF THE ATLANTIC. THE CONCEPT IS NOW BEGINNING TO BECOME ACCEPTED IN THE GERMAN MARKET.

IT IS SIMPLE, BUT EFFECTIVE: THE CLIENT PURCHASES A SHARE IN AN THE MINIMUM AMOUNTS TO ONE EIGHTH AND THUS OBTAINS THE RIGHT TO A CERTAIN NUMBER OF FLYING HOURS. TO USE THE AIRCRAFT, THE CLIENT CALLS THE CENTRAL COORDINATION OFFICE AND NOTIFIES ITS REQUEST. AT THE REQUESTED DATE AND TIME, THE AIRCRAFT IS DISPATCHED TO THE CORRECT LOCATION AND FLIES THE CLIENT TO ITS DESTINATION. THE DIFFERENCE TO OWNERSHIP, CHARTER AND FRACTIONAL OWNERSHIP FOR THE USER LIES IN THE GUARANTEE OF THE AVAILABILITY OF THE TRANSPORT SERVICE.

WITH RESPECT TO COSTS, FRACTIONAL OWNERSHIP BECOMES INTERESTING FOR THE CLIENT AS HE ONLY NEEDS TO PAY THE PURCHASING PRICE PROPORTIONAL TO HIS OWNED SHARE. HE ALSO ONLY PAYS APART FROM A GENERAL MONTHLY MANAGEMENT FEE THE ACTUAL OPERATING HOURS THAT HE USED THE AIRCRAFT.

IN CONTRAST TO THE UNITED STATES, THE FRACTIONAL OWNERSHIP CONCEPT SEVERAL OBSTACLES IN EUROPE AND GERMANY, SUCH AS DIFFERENT TAX LAWS WITHIN THE EU, DIFFERING INFRASTRUCTURES AND EXPECTATIONS OF CLIENTS. TO GIVE AN EXAMPLE: IN THE UNITED STATES MOST AIRPORTS OPERATE 24 A DAY, IN EUROPE FLIGHT OPERATIONS OPERATE MAINLY DURING DAY TIME. IN CONTRAST TO EUROPE, SLOTS ARE NEEDED TO LAND ON A FEW INTERNATIONAL AIRPORTS IN THE UNITED STATES ONLY.

THE IMAGE OF BUSINESS AVIATION AS SUCH PLAYS AN IMPORTANT ROLE AND DIFFERS, AS WELL. AS THIS SECTOR IS CONSIDERED TO BE A LUXURY IN GERMANY EVEN IF THE AIRCRAFT IS USED BY MEMBERS OF THE BOARD OF DIRECTORS BUSINESS AVIATION IS CONSIDERED TO BE A MERE PRACTICAL MEANS OF TRANSPORTATION IN THE UNITED STATES.

ASSOCIATIONS

LIKE ALMOST EVERY OTHER INDUSTRY SECTOR, GENERAL AVIATION, AERIAL WORK AND BUSINESS AIR TRANSPORT ARE REPRESENTED BY SEVERAL ASSOCATIONS. IN THE FIELD OF BUSINESS AVIATION IT IS ESPECIALLY THE AIRCRAFT OWNERS AND PILOTS' ASSOCIATION (AOPA GERMANY) WHICH IS BEING ACTIVE FOR THE INTERESTS OF ITS MEMBERS, IN THE SECTOR OF SPORTS AVIATION, THE AEROCLUB (DAEC) HAS TO BE MENTIONED.

FURTHER SPECIFIC INTEREST-RELATED ASSOCIATIONS PERFORMING LOBBY WORK THE MEMBERS ARE THE BUNDESVERBAND DER BETRIEBE DER ALLGEMEINEN E.V. (BBAL), THE AKTIONSGEMEINSCHAFT LUFT- UND RAUMFAHRTORIENTIERTER UNTERNEHMEN E.V. (ALROUND), THE DEUTSCHE HUBSCHRAUBERVERBAND (HELICOPTERS) AND THE GERMAN BUSINESS AVIATION ASSOCIATION (GBAA).

TASKS, OBJECTIVES AND ACTIVITIES DO IN SOME CASES OVERLAP. TO ENSURE BETTER COORDINATION WITH REGARD TO IMPORTANT QUESTIONS IN TRANSPORT AND ENVIRONMENTAL POLICY ISSUES, TAXES, CHARGES, FEES ETC. THE DIFFERENT ASSSOCIATION HAVE BUILT A PLATFORM CALLED "PRO AVIATION", WHICH FROM TIME TO TIME ACTS ON BEHALF OF ALL OF ITS SPONSORS JOINTLY.

MAIN OBJECTIVES OF "PRO AVIATION"

- IMPROVE THE GENERAL IMAGE OF AVIATION IN PUBLIC
- CORRECT INCORRECT STATEMENTS ON AVIATION WHICH ARE MADE IN PUBLIC
- CREATE FACTUAL BACKGROUND ON THE ECONOMIC BENEFITS OF AVIATION

BUSINESS AVIATION

AVIATION COMPANIES AND THEIR ENVIRONMENT

IN THE FIELD OF GENERAL AVIATION AND BUSINESS AVIATION, SEVERAL SMALL AND MEDIUM SIZED COMPANIES ALSO SUPPLY LARGE OEM MANUFACTURERS DAIMLERCHRYSLER AEROSPACE. GERMAN CIVIL AVIATION COMPANIES ARE DIVIDED INTO THREE SECTORS:

- DEVELOPMENT COMPANIES (APPROVED BY THE FEDERAL DEPARTMENT OF AVIATION FOR THE DEVELOPMENT OF AVIATION DEVICES SUBJECT TO EXAMINATION AND SAMPLE TESTING)
- MANUFACTURING COMPANIES (APPROVED BY THE FEDERAL DEPARTMENT OF AVIATION FOR MANUFACTURING OF AVIATION DEVICES IN ACCORDANCE WITH APPROVED SAMPLES AND SUBJECT TO AN EXAMINATION OF ALL MANUFACTURED ITEMS)
- AVIATION TECHNOLOGICAL COMPANIES (APPROVED BY THE FEDERAL DEPARTMENT OF AVIATION FOR THE FOR THE IMPLEMENTATION OF SERVICING AND MAINTENANCE OF FIXED AND ROTOR WING AIRCRAFT.

DEVELOPMENT COMPANIES

BASED ON 1996 STATISTICS, 41 COMPANIES OPERATED IN THE FIELD OF DEVELOPMENT ALREADY MENTIONED ABOVE. IMPORTANT TASKS IN GERMANY WHICH WOULD HAVE TO BE FULFILLED BY THESE DEVELOPMENT COMPANIES ARE THE DEVELOPMENT OF STROKE PISTON ENGINES, CIRCULAR PISTON ENGINES AND TECHNOLOGY IN THE FIELD OF AVIONICS. ALTHOUGH, IN GERMANY AS HAVE INSUFFICENT CAPITAL DEVELOPMENT PROGRAMS IN THE MENTIONED FIELDS CAN ONLY BE IMPLEMENTED WITH THE ASSISTANCE OF PUBLIC PROMOTIONAL FUNDS FROM AVIATION RESEARCH PROGRAMS. WITHIN THE AVIATION RESEARCH AND TECHNOLOGY PROGRAM THE SUBJECT AVIATION PROPULSION IS INCORPORATED.

MANUFACTURERS

MANUFACTURERS APPROVED BY THE FEDERAL DEPARTMENT OF AVIATION MUST PROVE THAT DEVICES OR SAMPLES MANUFACTURED CORRESPOND WITH AIRWORTHINESS REGULATIONS AND DIRECTIVES. IN GERMANY THERE ARE CURRENTLY 141 SUCH COMPANIES, 124 OF WHICH STRICTLY MANUFACTURE OR SUPPLY FOR GENERAL AVIATION.

MOST AIRCRAFT USED IN GERMANY ARE SELF-PROPELLED FIXED WING AIRCRAFT WITH A MAXIMUM TAKEOFF WEIGHT OF UP TO 2 TONS (CLASS E). SEVEN PERCENT

OF THESE CLASS E AIRCRAFT REGISTERED IN GERMANY ARE MANUFACTURED IN GERMANY, (500 AIRCRAFT), AMONG THEM AIRCRAFT MANUFACTURED BY DORNIER, EXTRA FLUGZEUGBAU, GROB ETC. GERMAN COMPANIES, THOUGH, DO NOT HAVE A GLOBAL MARKET SHARE LIKE US COMPANIES SUCH AS PIPER, BEECHCRAFT AND CESSNA.

AVIATION TECHNOLOGY COMPANIES

AVIATION TECHNOLOGY COMPANIES IMPLEMENT REPAIR WORK, MAINTENANCE AND SERVICING. ACCORDING TO A STUDY, THE NUMBER OF AVIATION TECHNOLOGY COMPANIES IN GERMANY AMOUNTS TO 565, WHICH IS ACCORDING TO IAOPA AN EXCESSIVELY HIGH ESTIMATE. THEY ESTIMATE THE NUMBER AT AROUND 400 COMPANIES.

THE GERMAN ENVIRONMENT

RESEARCH AND DEVELOPMENT IN THE FIELD OF AVIATION EQUIPMENT FOR GENERAL AVIATION IS EXPENSIVE AND THEREFORE, ALMOST IMPOSSIBLE WITHOUT PUBLIC FUNDING. AS ALREADY STATED THE PROMOTION OF DEVELOPMENT OF LIGHT AIRCRAFT FOR GENERAL AVIATION IS NOT INCORPORATED IN THE GERMAN RESEARCH AND TECHNOLOGY PROGRAM. GENERAL AVIATION FALLS UNDER THE RESPONSIBILITY OF THE FEDERAL STATES.

FUEL COSTS

A VERY IMPORTANT FACTOR INFLUENCING GENERAL AVIATION ARE FUEL COSTS. BASED ON 1996 STATISTICS, GENERAL AVIATION PAYS APPROXIMATELY USD 32 MILLION FUEL OIL TAX PER ANNUM. IN GERMANY THE LITER FUEL COSTS USD 1.3, WHICH IS 3.5 TIMES HIGHER THAN IN THE U.S.

AIRCRAFT USED

THE FEDERAL DEPARTMENT OF AVIATION PUBLISHES STATISTICS ON THE REGISTERED NUMBER OF ENGINE AIRCRAFT IN GERMANY, WHICH AMOUNTED TO IN 1996 RANGING FROM SINGLE-ENGINED AIRCRAFT BELOW 2 TONS TO MULTI-ENGINED AIRCRAFT BETWEEN 2 AND 5,7 TONS. REGISTERED HELICOPTER TO 704. ACCORDING TO THE STATISTICS, 75% OF ALL AIRCRAFT USED IN GENERAL AVIATION ARE MORE THAN 15 YEARS OLD.

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